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REMARKS

Reconsideration and further examination is respectfully requested.

Rejections under 35 U.S.C. §101

Claims 1-6 and 8-10 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Applicants have amended the claims to overcome this rejection, for example by amending claims 1-5 to be directed to a 'computer implemented method' and claims 6 and 8-10 to be directed to a computer device having an operating system stored on computer readable medium. It is respectfully requested that the rejection be overcome and should be withdrawn.

Rejections under 35 U.S.C. §103Claims 1,2,3,5,6,8,10,11, 13 and 15:

Claims 1, 2, 3, 5, 6, 8, 10, 11, 13 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Saleh, (U.S. Patent Application publication 2003/0058804A1), hereinafter Saleh, in view of Welland et al. (U.S. 5,247,677, hereinafter Welland).

The Examiner is thanked for the careful review of Applicant's last response. In response to the Examiner's statements, Applicant would like to further clarify some points of distinction between the cited prior art and the applicants claim, and also correct the Examiner's interpretation of Applicant's arguments.

Examiner's Argument

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In the response to the previous office action, Applicant had directed the Examiner to the full text of paragraph 55, which states clearly that 'Topology distribution normally runs ... at a much lower priority...' Applicants can only assume that such a statement infers that there *are* relative priorities assigned to tasks, and that topology distribution is assigned a *lower* priority.

The Examiner states that 'this does not mean that the tasks priorities are fixed (sic) ' and states that they are 'thus capable of changing'. The Examiner further states, 'Applicant alleges that the Examiner's statement in which task priorities are NOT fixed is simply contradictory to the teaching of Saleh. Examiner concluded with such statement based on Saleh's disclosure on page 4, paragraph 55. If applicant believes such statement is contradictory to Saleh's teaching and that Saleh teaches of tasks with fixed priority or that tasks cannot be changed, then applicant needs to provide citation in the reference to show such support...'

It appears that the same portion of text that is cited by the Examiner to prove that Saleh's tasks *do* change priority is the same portion of text *that was* cited by the Applicant as supporting that the tasks have assigned, fixed, priorities. This portion of text recites "Topology distribution normally runs ... at a much lower priority..." Applicants maintains that such a statement infers that there *are* relative priorities assigned to tasks. However, there is not even an inference that the priorities of the *individual* tasks are changed during operation. In fact, a statement that 'LSA distribution is boosted to a higher priority' is totally inconsistent with the teachings of Saleh, which states that 'topology distribution ... runs ... at a much lower priority...'

After exhaustive review of Saleh, Applicants note that Saleh describes only assigning QoS levels to services, with higher QoS getting higher priority. Thus although there is disclosed,

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in Saleh, a mapping of service level to priority. Applicant can find no mention *anywhere* in Saleh that the priorities assigned to tasks are dynamic, and may change based on the receipt of an LSA.

However, Applicants claim is *not* directed merely to the fact that a priority level for a task changes. It is that a priority level allocated to a *routing* task changes *in response to the receipt of a LSA*.

While Saleh describes in depth what happens when an LSA is received, there is simply no mention of suggestion that the priority allocated to a routing task increases or decreases based on the receipt of the LSA.

The Examiner states, at paragraph 19 of the response 'With respect to applicant's remarks that 'it would appear that the only teaching provided of such a step is applicant's application" (page 7, 3<sup>rd</sup> paragraph), the examiner disagrees. Saleh discloses that some tasks are being processed at a lower priority level than the other. Saleh also discloses that when a node receives an LSA message, it is first analyzed to determine the appropriate actions to be formed (paragraphs 99-100, and fig. 6). The LSA is then acknowledged by sending back an appropriate response to the node having transmitted the message. In other words, when performing the appropriate actions such as sending back an appropriate response to the node having transmitted the message, *the actions and/or the task that perform such actions is considered having a higher precedence than any other tasks, thus implies its priority changes...*"

Applicants fail to find the statement of the Examiner in Saleh. The portions of text cited by the Examiner do, indeed, recite steps that are performed, but there is absolutely no mention of the tasks having any precedence than other tasks. In fact, Saleh *explicitly* states that ' Topolgy

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distribution ... runs ... at a much lower priority...' than failure restoration activities. Thus, the Examiner's conclusion that the LSA servicing is raised in priority is simply not supported by the reference. If the Examiner is seeking to modify Saleh, to place LSA processing at a higher priority than restoration, then it would appear that such a modification goes directly against the teachings of the reference, and are therefore impermissible.

The Examiner also alleged, numerous times, that Applicant argued the references individually rather than in combination. Applicants respectfully disagree that such was done, but, for clarity purposes, will address the combination of the teachings of Saleh and Welland below.

Saleh, U.S. Application 2003/0058804A1:

Saleh describes a method which provisions a virtual path between a first and a second one of a plurality of nodes by: identifying the first and the second nodes, discovering a physical path from the first node to the second node, and establishing the virtual path. The Examiner relies upon certain portions of Saleh, for example page 4 paragraph 55 of Saleh describes:

"...Changes that occur in the network, whether caused by failed links, newly provisioned connections, or added/failed/removed nodes, are "broadcast" throughout the network, using special protocol packets and procedures. Topology distribution normally runs concurrently with, and in parallel to, failure restoration activities, but at a much lower priority. The directions are most likely to result in a usable route. This has a significant impact on the amount of broadcast traffic used to establish routes in large networks..."

The Examiner states at page 3 of the office action "... Saleh did not clearly disclose the step of raising the operating system task to a high priority level to perform the selected operation. Instead, Saleh discloses (paragraph 55) that some tasks are processed at a lower priority level

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than the other. Saleh also discloses (paragraphs 99-100)... that when a node receives LSA messages, it is first analyzed to determine the appropriate action to be formed. The LSA is then acknowledged by sending back an appropriate response to the node having transmitted the message... It is obvious for one of an ordinary skill in the art, at the time the invention was made, to recognize that when a Hello message is sent out with the LSAs, certain operations need to be performed as appropriate, thus implies boosting the tasks to a higher priority than normal to carry out the actions..."

The claims of the present invention are not merely directed to a system that has higher priority and lower priority tasks, but rather to one wherein 'raising the operating system task to a high priority level in order to perform the selected operation in response to a detection of a trigger condition comprising a link state advertising message indicating that the selected operation is to be performed...' This novel use of link state advertisements is not shown or suggested by Saleh.

However, Applicants acknowledge that the Examiner is reading Saleh together with Welland. Although the Examiner states, at page 6 of the office action that "Applicant's arguments against the references individually cannot show obviousness by attacking references individually where the rejections are based on a combination of references.." Applicants submit that a careful reading of Applicants' the last response will show the Examiner that the references were *not* argued individually, but rather that the combination was shown to *together* lack the elements of the Applicant's claim, including "...associating a plurality of routing operations with an operating system task, the plurality of *routing operations including the selected operation ... executing the operating system task at a low priority level prior to performing the selected*

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*operation; and ... raising the operating system task to a high priority level in order to perform the selected operation in response to a detection of a trigger condition comprising a link state advertising message indicating that the selected operation is to be performed...*

Welland describes a system wherein "...Tasks are selected for execution stochastically on the basis of a random number *weighted by task priority*. Because every task has a finite nonzero probability of being selected, the probability being proportional to the task priority, the present invention has the advantage that all tasks, even low priority ones, have a chance of being selected, thus eliminating the lockout problem..."

The Examiner relies on column 4, lines 44-62 of Welland, as teaching changing priority levels for tasks. Column 4 recites:

"... Another approach to the lockout problem is to apply small increments to task priorities for short intervals, based on events...Each event has a priority increment associated with it, which may be zero..."

However, Welland specifically recites the problem with such a priority altering scheme, at column 5 when it is described that "The priority increment process adds complexity to the scheduling process. Priority increments must be assigned for each event, and small changes in these increments can dramatically affect system behavior and performance. Furthermore, the lockout problem is not solved by the priority increment process..." Welland thus teaches *against* the desirability of such a system, but rather teaches the desirability of the system of Figure 5.

In determining whether there would be a motivation for combining the teachings of Welland with Saleh, the entire reference of Welland should be considered. For at least the reason that Welland ultimately teaches against the use of shifting priorities for different tasks, Applicants submit that the only fair combination of references would use the system of Welland

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where priorities are fixed. Because the combination of references neither describes nor suggests a system having wherein an operating system tasks is executed at a low priority, then raised to a high priority in response to the detection of *a trigger condition including a link state advertising message*, the combination of references fails to teach the claimed invention. As such, the rejection is under 35 U.S.C. §103 should be withdrawn.

For at least the above reasons, claim 1 is patentably distinguished over the combination of Saleh and Welland. Dependent claims 2-5 serve to further limit claim 1 and are allowable for at least the reasons put forth with regard to claim 1.

Independent claims 6 and 11 includes limitations similar to those that distinguish claim 1 from the combination of references and thus they, and their respective dependent claims 8-10 and 13-15 are patentable over the art.

Claims 4, 9 and 14;

Claims 4, 9 and 14 were rejected under 35 U.S.C. §1043 as being unpatentable over Saleh in view of Welland and further in view of Feldman. The Examiner relies on Feldman as teaching the use of a Dijkstra shortest path algorithm. However, the combination of Feldman with Saleh and Welland fails to overcome the fact that the combination does not teach a system having the structure put forth in the independent claims, *wherein the priority of a task is raised in response to a trigger condition*. For at least this reason, claims 4, 9 and 14 are patentably distinguishable over the combination of references, and the rejection should be withdrawn.

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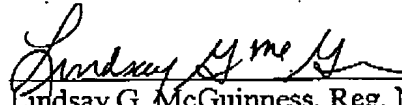
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Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Lindsay McGuinness, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

8/15/05  
Date

  
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